



GUAM FACT SHEET

FY 2020 FAST FACTS



\$4,490,000

Total NSF awards to Guam



\$4,140,000

Invested in fundamental research in Guam



\$350,000

Invested in STEM education in Guam

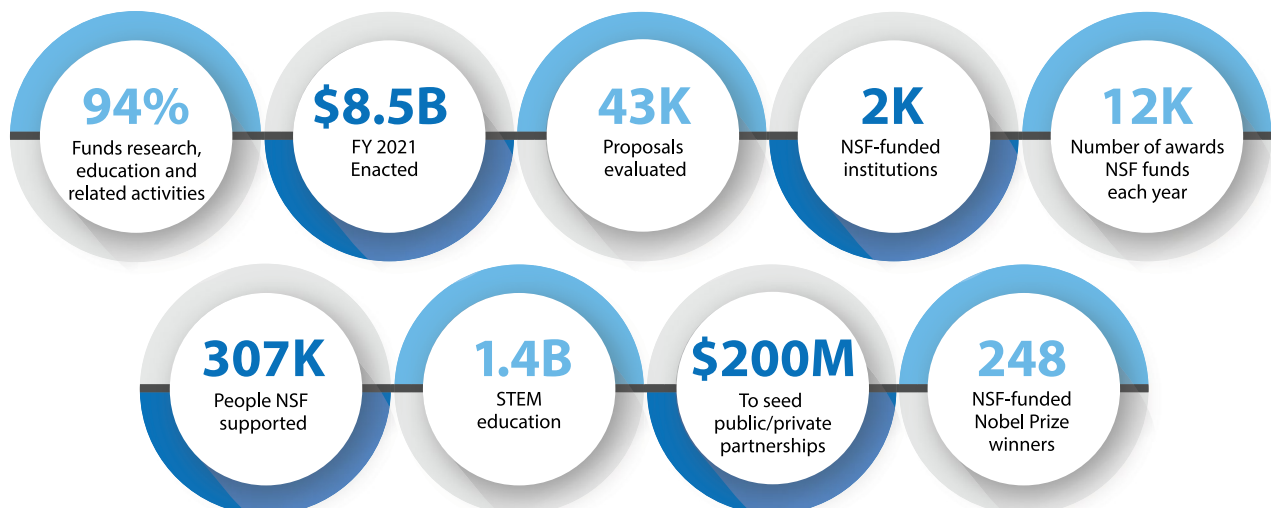
TOP NSF-FUNDED ACADEMIC INSTITUTIONS FOR FY 2020

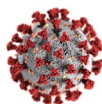
\$4,490,000

University of Guam

NSF BY THE NUMBERS

The National Science Foundation (NSF) is an [\\$8.5 billion](#) independent federal agency created by Congress in 1950 to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense. NSF's vital role is to support basic research and researchers who create knowledge that transforms the future.





NSF-FUNDED RESEARCH FIGHTING COVID-19

Congress provided NSF with funding to prevent, prepare for, and respond to COVID-19 in the CARES Act of 2020 and the American Rescue Plan Act of 2021. For more information on NSF's COVID research, visit [NSF's award database](#) and [COVID funding reports](#).



STEM EDUCATION

STEM WORKFORCE DEVELOPMENT | Through the NSF INCLUDES program, NSF awarded \$2.3 million to the **University of Guam** to support the INCLUDES Islands Alliance. INCLUDES -- Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science -- is a comprehensive national initiative to enhance U.S. leadership in discoveries and innovations by focusing on diversity, inclusion and broadening participation in STEM. The NSF INCLUDES Islands Alliance will use a collective approach to reach four goals: (1) establish a national network focused on coastal geoscience pathways in seven U.S. or U.S.-affiliated island jurisdictions (2) empower youth, undergraduates, graduates and post-graduates to pursue their interests in the marine and environmental sciences (3) connect partner organizations and individuals to each other and to additional resources, expertise and mentors (4) grow the larger NSF INCLUDES community. This is one of the first coordinated, collaborative efforts of its kind, envisaged to include Guam's underrepresented and underserved students in the nation's STEM enterprise.

Inclusion of nuanced cultural expertise from diverse underrepresented minority and underserved populations is needed to broaden participation in the geosciences, including populations in U.S. territories and U.S.-affiliated islands. Island regions are strongly connected to the oceans that surround them and are among the country's most diverse communities, with either majority or sizable populations of underrepresented minorities in STEM. The Islands Alliance will give participating partners and coastal communities agency to engage, address and solve collective coastal problems and grow the national STEM workforce by increasing understanding of context-specific, culturally relevant best practices for engaging underrepresented and underserved groups in STEM.



RESEARCH DRIVING WORKFORCE INNOVATION

FUTURE OF WORK | Guam EPSCoR -- Established Program to Stimulate Competitive Research -- received a \$20 million Research Infrastructure Improvement Track-1 award to create a world-class research and STEM training facility that will address challenges to the survival of coral reefs under rapidly changing environmental conditions within the region. Guam has the nation's most diverse and complex coral reef systems, and there is an urgent need to bring modern and cutting-edge studies to this ecosystem to address climate change challenges. This project will implement a systematic research agenda incorporating new knowledge of biodiversity, population genetics, genomics, phylogenetics, ecology, microbiology, oceanography and mathematical modeling to document and predict the taxonomic and functional diversity of reef-builders and associated taxa in a changing environment. Additionally, this award will enhance **University of Guam** cyberinfrastructure as a nexus for high-speed networks in the Pacific Rim and build high throughput computing capabilities for processing the big data sets generated by the genomic and oceanographic components of this project.

EPSCoR

- **COMPETITIVE RESEARCH** | **Guam is one of 28 U.S. states or territories under NSF's Established Program to Stimulate Competitive Research (EPSCoR). Over \$4,140,000 in awards have been made to Guam academic institutions through EPSCoR in FY 2020. For more information, visit [Guam's EPSCoR state web page](#).**

LEARN MORE

- **NSF70** – In 2020, NSF commemorated its 70th anniversary and the 75th anniversary of the publication of *Science - the Endless Frontier*. Watch the [highlight video](#) for NSF's seven decades of funding the best and brightest ideas that have transformed our lives and established the U.S. as a science and technology leader.
- **NSF FACT SHEETS** – NSF provides fact sheets about the agency and its bold investments in basic research. These fact sheets profile NSF investments in research across all fields of science and engineering, including [quantum](#), [artificial intelligence](#), and [advanced manufacturing](#), and the NSF-supported [research and computing infrastructure](#) powering the U.S. response to COVID-19.
- **CONNECT WITH NSF** – For more information on NSF's impact in your state, please contact NSF's Office of Legislative and Public Affairs at congressionalteam@nsf.gov.

